DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009031 Address: 333 Burma Road **Date Inspected:** 06-Sep-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Fabrication

Summary of Items Observed: CWI Inspector: Mr. Zhu Zhang Hai

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Tu Zhi Wu, stencil 0214945 is using flux cored welding procedure WPS-B-T-2132 to make weld SEG060C-027, The QA Inspector observed a welding current of approximately 300 amps and 31.0 volts and ZPMC QC Inspector Mr. Zhang Xian Ji is monitoring this welding. This QA Inspector observed that Mr. Tu Zhi Wu is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Chuanzong, stencil 044824 has been using flux cored welding procedure WPS-B-T-2231-TC-U4b-F to make weld SEG060B-003. The QA Inspector observed ZPMC QC Inspector Mr. Zhang Xian Ji has recorded a welding current of 309 amps and 30.3 volts. This QA Inspector observed that Mr. Chen Chuanzong is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC welder Mr. Sun Guzuo, stencil 058100 is using welding procedure specification WPS-B-T-2221-B-L2C-S-2 to make submerged arc groove weld SEG064*-003. This QA Inspector observed ZPMC Quality Control personnel monitoring this welding and this QA Inspector observed a welding current of approximately 610 amps and 36.00 volts and Mr. Sun Guzuo is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Lin Jiang, stencil 051356 is using flux cored welding procedure WPS-B-T-2133 to make corner assembly weld CA76-003. This QA Inspector observed a welding current of approximately 320 amps and 35.2 volts. This QA Inspector observed WPS-B-T-2133 indicates the acceptable voltage range is 23.9 to 27.5 volts and Mr. Wang Lin Jiang is approximately 8 volts above this maximum. This QA Inspector asked ZPMC QC Inspector Mr. Zhang Xian Ji what welding current and voltage he had measured earlier in the shift and Mr. Zhang Xian Ji said another QC Inspector had been monitoring this welder. This QA Inspector informed ZPMC CWI Mr. Zhu Zhang Hai that Mr. Wang Lin Jiang had high voltage and Mr. Zhu Zhang Hai said he did not know why the voltage was high, but he will adjust and monitor this welding more closely. This QA Inspector observed Mr. Wang Lin Jiang is certified to make this weld. Items observed on this date do not appear to fully comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Ye Shen Jun, stencil 203871 is using flux cored welding procedure WPS-B-T-2133 to make corner assembly weld SEG060C-012 at panel point 86 between floor beam FB012-031 and a longitudinal diaphragm. The QA Inspector observed a welding current of approximately 210 amps and 29.0 volts and ZPMC QC Inspector Mr. Zhong Guo Hui is monitoring this welding. This QA Inspector observed that Mr. Ye Shen Jun is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer